



logo

|                                              |                                                             |     |
|----------------------------------------------|-------------------------------------------------------------|-----|
| NTDB id 1306 DR RS10060 WP 027479822.1       | REALQVQARECKVKPLGCEVITELGCFASPDEVD                          | 400 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1  | .....EQAVVTQVSASGTSVPEALLSIFHAQELTEQLSHIFGEPETDLSRYDY       | 69  |
| NTDB id 1293 VP RS12240 WP 005479695.1       | .....EESLIEQVKASCISMPEALLSSGFFTSSELAEHLSSIFGSLSQPEY         | 69  |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1    | .....EESLIEQVKASCISMPEALLSSGFFQSHLTHSSVFCISCTSLNQY          | 69  |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....AEHYYNESQA..CKEVLPLMFLSDGVI..SPKSLAALIARVFSYSILDLRHYP  | 68  |
| NTDB id 1251 GC085 RS07725 WP 011946523.1    | .....AIELHKLAAAEKISLLQYIVKNKILSAEQIALTAQAQNFVPMIDINCIDV     | 77  |
| NTDB id 1102193 Q9277 RS07720 WP 011408072.1 | .....ARTAMEQAAA..AKVPLPQWFAENRLVSASQLAAANA..VEFCMPLMDVSVFDA | 79  |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....MQTALDAAKRAKQDVTAYL..EEVHLSPSLAETISAEFAEPYFDLDVYDT     | 77  |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....MQQALEKAKKFQKDVPVYLLIDNFS..SPLTTIAETISLEFGPEPLDLGVFDP  | 77  |
| consensus                                    | *****                                                       |     |

logo

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|----------------------------------------------|---------------------------------------------------------------------------------------|-----|
| NTDB id 1306 DR RS10060 WP 027479822.1       | DPKVALMIPETARRVYVVPVRLQGNLSLVVAMKDPRNVFALDDLKLTGKEILPAVMAEKDITIRITERYFGKGFKEKLNK      | 480 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1  | ANLCQQQLGLRELITRYDALPIAKQCENLLLLAVSDPTLLQAEEEFRAFATGLQVELALADHRAALQAATRRLYGRSISQGAANQ | 149 |
| NTDB id 1293 VP RS12240 WP 005479695.1       | ASLCQQQLGLRELITRHNALPLHRTPTSTLLAVADPTNQQAEDDFRAFATGLQVELVLADFRELSTAIRRLYGRSLSHEKSG    | 149 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1    | ASLCQTLGLRDLITRHNALPLNRTSSTLLAVADPTNQAEDDFRAFATGLQVELVLADFRELTAATRRLYGRSLGQKEKSG      | 149 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | HRVLMGVLTETHEQMVEFHCVPVFRRGDKVFFAVSDPTQMPQITQKTVSAAGTAVELVIVEDDQLAGLLDWVGRSTSLQL      | 148 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1    | GTIPVNLVNEKLIKRRHAMVPLFSRGTNLYLATDDPSKQASLKEITQFHTGLNTHAIVVETDKLSALIDNLLTAKESQGLSE    | 157 |
| NTDB id 1102193 Q9277 RS07720 WP 011408072.1 | NQNAVKLIVSEELIQKYHVLPLFKRCNRLFVGVSNPTQTRALDDIKFHTNVLVVEPTIVVEDQIRRTLEQWQASNAFGSSL     | 159 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | SQIPKDLVDQKLIKLRHILPLIQRGQILYVATSNPSNTEADDAIRFNSKLLVEPVIVEHHKLEKVLGQHFAEESSFDFND      | 157 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | ALFLKDKIDKELIQKYRIMPLVHRGHVLYVATSNPTNTEADDAIRFNSKLLVEPTIVVEHDKLERLLSEHVEETHFNFD       | 157 |
| consensus                                    | *****                                                                                 |     |

logo

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|----------------------------------------------|-----------------------------------------------------------------------------------|-----|
| NTDB id 1306 DR RS10060 WP 027479822.1       | ELA.....ERNKTQQSQEADLSVADESALVQVVDSTIREAALQDASDIHETTEDAVKVRVRLDGALREQNS           | 547 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1  | GKELISQDELANLVK...VSDDELQSIEDLSQDDSPVSRFINQVLLDAVRKGASDIHFEPYENQYRIRRCDCGILVETQQ  | 225 |
| NTDB id 1293 VP RS12240 WP 005479695.1       | LKEINQEELASLVD...VGADEINIEDLSQDESPPVSRFINQVLLDAVRKGASDIHFEPYEKMYRVRRLRCDCGILVETQQ | 225 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1    | LKEINQDELAGLVD...IGDEIENIEDLSQDESPPVSRFINQVLLDAVRKGASDIHFEPYENMYRVRRLRCDCGILVETQQ | 225 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | GEGQ.E.....EESHTLYIDNEEAEDGPVPRFIHKTLSDALRSASDIHFEPYEHMARIRFRVDCGQLEVVQ           | 215 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1    | YVEDSGDLEGLETSADD...EDQDIDTATSVTDAPITVKFVNKLLDAIRQGASDIHFEPYEREYRIRVRQDCGILHEVAT  | 234 |
| NTDB id 1102193 Q9277 RS07720 WP 011408072.1 | GNDD.EEMGDLDVSTGDEDMGAGGDSGVDAKGDDTPVVKFVNKVLVDATRRGASDIHFEPYEDDYRVRIRIDGILKNVAK  | 238 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....EE.FDLVDN..LDGPTAQEDDEEAPQGDAPITVKYINKLLDATRMGASDIHFEPYEKSYRVRVYRVDGVLRLQIAN | 229 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....EE.LDLDVD..VDPHTTDDDEDKCLKDEAPITVKYINKLLDATRMSASDIHFEPYEKSYRVRVYRVDGVLRLIAT  | 229 |
| consensus                                    | *****                                                                             |     |

logo

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|----------------------------------------------|------------------------------------------------------------------------------------|-----|
| NTDB id 1306 DR RS10060 WP 027479822.1       | FPKGAAQQIMARLIKIMGHLDIAERRVPQDGRVRF..KKGSIDLRLSTLPTVYGEKAVMRLLQKASNIPELEQLCFSEY    | 625 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1  | PASHLSRRRLAARIKILSKLDIAERRVPQDGRILKLSH..DTAIDMRVSTLPTLWGEKIVLRILDSSAANLIDTKLGYNPQ  | 304 |
| NTDB id 1293 VP RS12240 WP 005479695.1       | PPNHLSRRLSARIKILSKLDIAERRVPQDGRILKLNQ..DTAIDMRVSTLPTLTFGEKIVLRILDSSASLIDIDKLGYSEQ  | 304 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1    | PPSHLSRRLSARIKILSKLDIAERRVPQDGRILKLNQ..DTAIDMRVSTLPTLTFGEKIVLRILDSSAALDINKLGYSDS   | 304 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | PPIAVRGQLASRIKIVMSRLDISEKRIPQDGRMQLTFQKGGKPVDFRVSTLPTLFGKIVMRILNSDAASLNDIQLGHEPF   | 295 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1    | PPASLSSRITARIKIVMSNLDISERRIPQDGGFKMKISK..SRAIDFRVSTCPTSAGEKVMVRVLDSGAAKLGIEALGFNPV | 313 |
| NTDB id 1102193 Q9277 RS07720 WP 011408072.1 | APVKLSQRIARAIRKIVMSQLDIAEKRVPPQDGRILKLSK..TKQIDFRVSTLPTLFGKIVLRILDGSAAKLGIDKLGYEPD | 317 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | PPLQLANRLASRIKIVMSQMDISEKRVPPQDGRILKLSK..SKAIDFRVNSLPTLFGKIVLRILDPSSAMLGIDALGYEED  | 308 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | PPLQLATRLASRIKIVMSQMDISEKRVPPQDGRILKLSK..SKTIDFRVNSLPTLFGKIVLRILDPASAMLGIDALGYEPE  | 308 |
| consensus                                    | *****                                                                              |     |

logo

NTDB id 1306 DR RS10060 WP 027479822.1

NTDB id 1168 A1552VC RS11070 WP 000957200.1

NTDB id 1293 VP RS12240 WP 005479695.1

NTDB id 1401 DSB67 RS12665 WP 010643259.1

NTDB id 1110 NGFG RS09235 WP 003689817.1

NTDB id 1251 GC085 RS07725 WP 011946523.1

NTDB id 1102193 Q9277 RS07720 WP 011408072.1

NTDB id 1058 ABD1 RS01615 WP 001274986.1

NTDB id 1018 ACIAD RS01685 WP 004920473.1

consensus

Sequence logo for the first block. The logo shows the conservation of amino acids across 10 sequences. The consensus sequence is shown at the bottom.

705

384

384

384

375

393

397

388

388

logo

NTDB id 1306 DR RS10060 WP 027479822.1

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NTDB id 1102193 Q9277 RS07720 WP 011408072.1

NTDB id 1058 ABD1 RS01615 WP 001274986.1

NTDB id 1018 ACIAD RS01685 WP 004920473.1

consensus

Sequence logo for the second block. The logo shows the conservation of amino acids across 10 sequences. The consensus sequence is shown at the bottom.

785

464

464

464

455

473

476

467

467

logo

NTDB id 1306 DR RS10060 WP 027479822.1

NTDB id 1168 A1552VC RS11070 WP 000957200.1

NTDB id 1293 VP RS12240 WP 005479695.1

NTDB id 1401 DSB67 RS12665 WP 010643259.1

NTDB id 1110 NGFG RS09235 WP 003689817.1

NTDB id 1251 GC085 RS07725 WP 011946523.1

NTDB id 1102193 Q9277 RS07720 WP 011408072.1

NTDB id 1058 ABD1 RS01615 WP 001274986.1

NTDB id 1018 ACIAD RS01685 WP 004920473.1

consensus

Sequence logo for the third block. The logo shows the conservation of amino acids across 10 sequences. The consensus sequence is shown at the bottom.

862

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536

536

533

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552

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545

logo

NTDB id 1306 DR RS10060 WP 027479822.1

NTDB id 1168 A1552VC RS11070 WP 000957200.1

NTDB id 1293 VP RS12240 WP 005479695.1

NTDB id 1401 DSB67 RS12665 WP 010643259.1

NTDB id 1110 NGFG RS09235 WP 003689817.1

NTDB id 1251 GC085 RS07725 WP 011946523.1

NTDB id 1102193 Q9277 RS07720 WP 011408072.1

NTDB id 1058 ABD1 RS01615 WP 001274986.1

NTDB id 1018 ACIAD RS01685 WP 004920473.1

consensus

Sequence logo for the fourth block. The logo shows the conservation of amino acids across 10 sequences. The consensus sequence is shown at the bottom.

887

562

561

561

558

574

577

570

570

 non conserved  
 similar  
  $\geq 50\%$  conserved